



The theme for June is remote sensing. This issue is devoted to an historic remote sensing mission to Jupiter.

Featured Mission



The Little Spacecraft That Could

In the upper reaches of Jupiter's dense atmosphere, one of NASA's most successful spacecraft ended its mission in pieces. Galileo was launched from the cargo bay of the Space Shuttle Atlantis in 1989. Originally intended to last eight years, Galileo's mission was extended three times before it finally plunged into Jupiter's atmosphere fourteen years after launch. During its trip to Jupiter, Galileo sent back the first ever close-up pictures of an asteroid, discovered the first known asteroid with its own moon and recorded the only images ever taken of a comet striking a planet.

Studying objects or places without coming into direct contact with them is called remote sensing. Aircraft and satellites are used to study Earth from air and space. Galileo allowed researchers to remotely study Jupiter and its largest moons the same way: it passed close by and sent data back to Earth. Thanks to those data we now know that Jupiter's moon, Europa, could be hiding a salty ocean underneath its frozen surface and that its moon, Io, has volcanic activity 100 times greater than that found on Earth.

galileo.jpl.nasa.gov

Activity Corner

Build your own scale model paper Galileo spacecraft. You'll need a printer, card stock, a transparency and a few other items that are listed in the assembly instructions.

www2.jpl.nasa.gov/galileo/model/instructions.html

Bytes and Bits



Teaching always has its ups and downs, but it's not often teachers experience them like NES team members from Pender Public Middle, Crossroads Elementary and also Sioux Central Middle Schools did onboard NASA's KC-135 last month. They took part in NASA's Reduced Gravity Program (featured in March NES News) and experienced the feeling of weightlessness.

Read journals and see pictures from the trip at

crossroads.spps.org/Reduced_Gravity_Flight.html

How is oxygen recycled on the International Space Station?

Question of the Month

The first ten correct answers sent to NESNews@nasa.gov will receive a NASA prize! Include your first and last name, your teacher's name and the name and address of your school.

Answer to last month's question: *Fincke and Padalka*

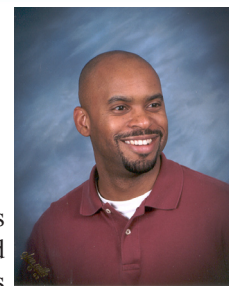
See which schools got it right on the NES News website!

NASA Explorers are people like you

Name: Frederick D. Smith

Education: BS in Psychology and BS in Mechanical Engineering

Job: Advanced Life Support Air Revitalization Project Manager



At NASA Johnson Space Center, Frederick leads a team responsible for developing, testing and evaluating air revitalization (AR) technologies for potential use on the International Space Station, exploration transit vehicles and planetary applications. His team studies tools to recycle and extend the use of limited air supplies in space and on other planets. "One of the best things about my job is working on technologies that may enable us to one day go back to the Moon and on to Mars!" He says, "one thing I like to tell students is not to give up on their dreams...I didn't always do the best in my classes, but I stuck with it." Frederick's hard work paid off when he fulfilled his dream of working with NASA. In his spare time, Frederick likes to scuba dive because "it is like being in another world."

NES Spotlight

Howard Bishop Middle School

Students: 1068

Teaching staff: 75

Howard Bishop Middle School prides itself on bringing in new and invigorating programs. Founded in 1962, Bishop has an extremely diverse population. Over 400 Bishop students are part of Bishop's Academy of Technology and Gifted Studies. As a technology and science magnet, Bishop's overall population benefits from five computer labs and every classroom is connected to the Internet by at least one computer. The school is located in north central Florida and has a design that allows for a park-like atmosphere with open halls and many trees. Bishop Middle has been awarded two grants to bring college students into classrooms to perform labs and help set up field trips. The school's math and chess teams have finished at the highest levels within the state. Each year more and more students compete on the school's math teams. Looks like hard work and dedication really add up at Howard Bishop Middle School!

www.sbac.edu/~bms/



National Aeronautics and
Space Administration

Please send comments or questions to NESNews@nasa.gov
learners.gsfc.nasa.gov/ExplorerSchoolsNews